

PATENT



IPW

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

|                            |   |                        |
|----------------------------|---|------------------------|
| In re Application of:      | : |                        |
|                            | : |                        |
| Chae-Whan Lim et al.       | : | Group Art Unit: 2623   |
|                            | : |                        |
| Serial No.: 10/765,085     | : | Examiner: Not Assigned |
|                            | : |                        |
| Filed: January 28, 2004    | : |                        |
|                            | : |                        |
| For: DEVICE AND METHOD FOR | : |                        |
| CORRECTING SKEW OF AN      | : |                        |
| OBJECT IN AN IMAGE         | : |                        |
|                            | : |                        |

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In accordance with 37 C.F.R. §§ 1.56 and 1.97-1.98, Applicants hereby transmit copies of the documents listed in the attached Form PTO-1449, which may be deemed material to the examination of the above-identified application.

In accordance with the amendments to 37 C.F.R. §1.98(a) (revisions effective Oct. 21, 2004) and as discussed in the Official Gazette on Oct. 19, 2004 (1287 OG 163), copies of U.S. patents and published applications cited herein have been omitted.

As indicated, all documents are in English or include English abstracts and therefore, no statement of relevance is required. Also, since the present Information Disclosure Statement is being filed prior to issuance of a first Office Action on the merits, no certification under 37 C.F.R. § 1.97(e) or fee under 37 C.F.R. § 1.17(b) is required.



The Examiner is requested to consider the attached documents in connection with the above-identified application and to return a copy of Form PTO-1449 to the Applicants with the Examiner's initials in the spaces provided.

Submission of this Information Disclosure Statement does not constitute an admission by the Applicants as to the materiality of the attached documents to the application, nor do the Applicants waive any right to challenge the validity of the documents as prior art should such action be deemed appropriate.

Respectfully submitted,

A handwritten signature in cursive script that reads "Demetra Smith-Stewart".

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Dated: May 3, 2006



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| Form PTO-1449 U.S. DEPARTMENT OF COMMERCE<br>PATENT AND TRADEMARK OFFICE<br><br>INFORMATION DISCLOSURE STATEMENT<br><br>(Use several sheets if necessary)  |  | ATTY. DOCKET NO.<br>46248  |            | SERIAL NO.<br>10/765,085 |       |           |                  |    |
|  |  | APPLICANT<br>Chae-Whan Lim et al.  |            |                          |       |           |                  |    |
|  |  | FILING DATE<br>January 28, 2004  |            | GROUP<br>Not Assigned    |       |           |                  |    |
| <b>U.S. Patent Documents</b>   |  |  |            |                          |       |           |                  |    |
|  |  | Patent No.   | Date       | Patentee                 | Class | Sub-class | Filing Date      |    |
|  |  | 5,101,438  | 3/31/1992  | Kanda et al.             | 382   | 176       | 1/24/1991        |    |
|  |  | 5,995,657  | 11/30/1999 | Sunakawa et al.          | 382   | 170       | 12/16/1997       |    |
|  |  | 4,876,732  | 10/24/1989 | Miyagawa et al.          | 382   | 288       | 5/18/1987        |    |
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|  |  |  |            |                          |       |           |                  |    |
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|  |  |  |            |                          |       |           |                  |    |
| <b>Published U.S. Patent Application</b>   |  |  |            |                          |       |           |                  |    |
|  |  | Patent No.   | Pub. Date  | Patentee                 | Class | Sub-class | Filing Date      |    |
|  |  |  |            |                          |       |           |                  |    |
|  |  |  |            |                          |       |           |                  |    |
|  |  |  |            |                          |       |           |                  |    |
| <b>Foreign Patent Documents or Foreign Patent Applications</b>   |  |  |            |                          |       |           |                  |    |
|  |  | Document No.   | Pub. Date  | Country or Patent Office | Class | Sub-class | English Abstract |    |
|  |  | 0 431 960 A2   | 6/12/1991  | EUROPE                   |       |           | Yes              | No |
|  |  |  |            |                          |       |           | X                |    |
|  |  |  |            |                          |       |           |                  |    |
|  |  |  |            |                          |       |           |                  |    |
| <b>OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)</b>  |  |  |            |                          |       |           |                  |    |
|  |  | G. Kapogiannopoulos et al.: "A fast high precision algorithm for the estimation of skew angle using moments"; Proc. International Conference Signal Processing, Pattern Recognition, And Applications (SPPRA 2002), IASTED; 6/25/2002; Pages 275-279.  |            |                          |       |           |                  |    |
|  |  | Su Chen et al.: "Automatic text skew estimation in document images"; Document Analysis And Recognition, 1995.; Proceedings Of The Third International Conference On Montreal, Que., Canada; 14-16; August 1995; Los Alamitos, CA, USA, IEEE Comput. Soc, US; vol. 2; August 14, 1995; Pages 1153-1156. |            |                          |       |           |                  |    |
|  |  | Osamu Nakamura et al.: "Extraction Of Photographic Area From Document Images" Electronics & Communications In Japan, Part I – Communications, Wiley, Hoboken, NJ, US; vol. 71, no. 6; June 1, 1988; Pages 76-85.   |            |                          |       |           |                  |    |
|  |  | J.H. Park et al.: "Skew correction of business card images in PDA"; IEEE Conf. On Communications, Computers And Signal Processing (PACRIM 2003); August 28, 2003.  |            |                          |       |           |                  |    |
| *EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw Line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. |  |  |            |                          |       |           |                  |    |